

# Write of Healing in the South Pacific

— Complementary and Alternative Medicine in Print Media —

## 南太平洋での治療について

— 出版物における補完代替医療 —

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**Abstract :** Media health reporting influences health-related attitudes and behaviors. An area that has received little attention is how CAM-related topics are comparatively framed in the national media of developing and developed nations. This paper uses media framing as a lens on the socio-cultural, socioeconomic, political, and legal determinants of CAM's degree of access, acceptance, and use in developed countries and small island nation states. Using content analysis, the national newspapers of two countries with different socioeconomic characteristics are investigated as case studies: *The New Zealand Herald* in New Zealand (a developed country) and *The Fiji Times* in Fiji (a small island nation) for the time period 2004-2016. Overall, both countries reported an increased use of CAM. In New Zealand, there was no discussion of the disparities in healthcare access and CAM use. Fiji covered the lack of access to conventional medicine, disparities in healthcare access due to geographical and economic barriers. CAM related research was presented, which was mostly negative in the case of New Zealand and positive in the case of Fiji. Both countries were concerned about the legal implications of CAM use. Findings provide indications of access and quality of access to healthcare provisions within a country, and the current and future potential of CAM within the healthcare scheme of a society.

**要旨：**メディアの健康報道は健康関連の行動に影響を及ぼす。今までに、ほとんど注目を受けていない領域は、CAM（Complementary and Alternative Medicine）関連の話題で、発展途上国と先進国のメディアでの表現の差である。本稿では、先進国と南太平洋の小さな島国でCAMがどのように受け入れられ使われているか、社会文化的、社会経済的、政治的、法的にメディアの目を通して考察する。内容分析を用いて、社会経済的特徴が異なる2つの国の全国紙でケーススタディとして調査する。先進国としてニュージーランドのニュージーランドヘラルド、小さな島国としてフィジーのフィジータイムズを用いる。期間は2004年から2016年である。両国においてCAMの使用は増加している。ニュージーランドでは、ヘルスケアアクセスとCAMの使用における差はなかった。フィジーでは地理的障害、経済的障害によるヘルスケアアクセスの差と伝統的な医学へのアクセスの不足をCAMの使用がカバーした。両国はCAM使用の法的整備に関心があった。調査結果は、ヘルスケア計画の中でのCAMの可能性と、国のヘルスケアの将来性を提示する。

**Keywords :** Health communication, complementary and alternative medicine

## 1. Introduction

What constitutes healthcare at the individual and societal levels has changed over the last decade.

Healthcare shows marked disparity between the developed and developing worlds, as well as within the developed world (Egede, 2006). A major area of change has been in the increased recognition of

Table 1: Categorizations of CAM

CAM categories	Examples of CAM practices per category
Alternative medical systems <i>Ancient, including indigenous healing knowledge systems that have been practiced over generations</i>	Maori, Fijian, Chinese and other traditional medicine systems, Ayurveda, Homeopathy, Naturopathy, iridology
Mind-body practices <i>Based on the principle that the mind has the ability to influence the physical body</i>	Yoga, meditation, faith healing, Tai Chi, colour therapy, music therapy, hypnosis, aromatherapy
Biologically based systems <i>External application or internal ingestion of naturally occurring substances</i>	Herbal and dietary supplements, topical herbs, dietary regimes, animals and/or animal parts
Manipulative and body-based practices <i>Healing of the body through manipulation of parts of body</i>	Chiropractic, acupuncture, massage, reflexology
Energy based therapies <i>Use of energy fields</i>	Reiki, Qigong, Rife, magnets, quantum healing, rife machines

(Adapted from Gopalkrishnan, 2015: 106)

complementary and alternative medicine (CAM) as a legitimate part of healthcare. Complementary and Alternative Medicine (CAM) refers to societal healthcare practices that are outside the domain of a country's officially recognized conventional healthcare system (World Health Organization, 2013). The societal terminology used to refer to CAM can be quite different depending on where we are. In New Zealand and Fiji, CAM collectively refers to traditional indigenous healing systems of their respective countries, complementary medicine, and alternative medicine.

While in the developed world CAM may be an option in addition to conventional healthcare, in developing countries CAM may be the sole form of healthcare or a vital component of healthcare that the majority of the citizens have access to (WHO, 2013).

## 2. Media coverage of CAM

Media reporting of CAM is becoming more common around the world and media has a major influence on society's CAM-related behavior (Bonevski, Wilson & Henry, 2008; Bubela, Boon & Caulfield, 2008; Weeks & Strudsholm, 2008; Weeks, Verhoef & Scott, 2007). An area of research that has received little attention is how CAM-related topics are comparatively framed in developing and developed nations (Clarke, Romagnoli, Sargent, & van Amerom, 2010). Such a study is vital because decisions about types of healthcare sought

are influenced by culture (Institute of Medicine, 2005), which is often intricately tied to disparity and poverty issues as well as the national laws, policies and regulations around healthcare access (Tripp-Reimer, Choi, Kelley & Enslein, 2001).

This paper analyzes media's framing of population health determinants that govern CAM's degree of access, acceptance, and use within developed countries and developing small island nation states. Two countries within the South Pacific are investigated as case studies with different socioeconomic characteristics: New Zealand (a developed country) and Fiji (a small island nation). Through an analysis of media's thematic framing of CAM related issues in the two countries, the researcher investigated the following:

- 1) How do newspapers depict national socio-cultural determinants of CAM usage?
- 2) How do newspapers present national socio-economic determinants of CAM practices?
- 3) How do newspapers discuss national legal and political determinants of CAM usage?

The integration of the three themes provides an overview of media's perspective on CAM's role in societal healthcare access from a population health-oriented approach. The paper presents emergent themes across the two case studies and discusses how the findings can help achieve greater success rates for the incorporation of CAM as part of each country's public health service, including reducing healthcare cost and improving healthcare quality.

The study therefore provides an important lens on the UN's recently proposed SDG goals, specifically the intersection of the UN's Sustainable Development Goal (SDG) 3 ("all people have access to needed, quality health services without suffering financial hardship") with SDG 10 ("reduce inequality within and among countries") in relation to national healthcare system access within and between developing and developed nations (UN Chronicle, 2014: 9-10; 23-25).

### 3. Theoretical framework

In his discussion of framing in news stories, Gitlin describes the process as "principles of selection, emphasis and presentation composed of little tacit theories about what exists, what happens and what matters" (Gitlin, 1980: 7). Similarly, Entman (1993) describes framing as 'a selection process' that "defines problems," "diagnoses causes," "makes moral judgements," and "suggests remedies." Kahneman & Tversky (1984, cited in Entman, 1993: 53-54) demonstrate the power of framing through its selective presentation of a topic in directing an audience's attention towards the topic, and therefore away from other aspects of reality around an issue. Hence, close examination of media framing on health issues provides an important means of engaging with societal views on health (Seale, 2003) and this inquiry has implications for the practice of healthcare, health education, policy development, and health governance laws.

### 4. Method

*Data:* The study used content analysis to examine the incidence of CAM reporting in New Zealand, and Fiji newspapers. Articles featuring CAM in *New Zealand Herald* and *The Fiji Times* were chosen for analysis for the time period 2004-2016. *The New Zealand Herald* is the most widely read English daily newspaper in New Zealand, with a circulation of 140,603 and a daily readership of 425,000. *The Fiji Times* was chosen because it is the longest serving newspaper in the Pacific, is produced daily and has

the highest weekly readership figures of all the newspapers in Fiji (72,993).

*Methodology:* The following keywords were used to search for database articles from the three newspapers: alternative treatment, alternative medicine, alternative healing, alternative therapy, alternative remedy, herbal medicine, herbal treatment, herbal healing, herbal remedy, herbal therapy, traditional treatment, traditional medicine, traditional therapy, traditional remedy, traditional healing. A total of 123 articles were found, 72 from *New Zealand Herald* and 51 were from *The Fiji Times*. The study analysed 111 articles. Articles were omitted if they fell into one or more of the following categories: Summary of the week's news; reduplications of the same news article in the same newspaper; advertising articles e.g. beauty therapy clinics, beauty products, travel destinations and activities, fashion products; articles that mentioned one of the keywords (e.g. alternative treatment) but were not talking about CAM; and letters to the editor.

*Analysis:* Using the mixed methods software, MAXQDA, the articles' heading, lead, and content were examined for manifest and latent themes. The articles were then categorized into thematic groupings to provide in-depth information on themes under each keyword for each newspaper. For both stages, the researcher and research assistant worked independently using the same coding template, then cross-checked their categorizations for validity. An inter-coder reliability test achieved over 80% for pair work concordance. Where there was ambiguity, a mutual decision was reached through discussion.

*Limitations:* The present study contains some limitations, which could be addressed in future research. In this study, only one newspaper from each country was analysed. While the newspapers have the highest circulation rates in their respective countries, it is unclear who actually reads these newspapers and how much of the health information is assimilated or applied. The vernacular newspapers, radio and television news stories, which lie outside our field of study, may have different framing emphases and their CAM-related news may have a

better reach to the target audience.

## 5. Results

### 5.1 Socio-cultural determinants of CAM use

The use of CAM as complementary treatment was a dominant theme across both newspapers. The newspapers presented CAM positively for providing pain relief and/or as a treatment regime in addition to conventional medicine. For both newspapers, the majority of articles dealt with chronic illness, in particular cancer types and the use of CAM for pain relief, in addition to conventionally prescribed medicine. Both newspapers mentioned herbal remedies in relation to cancer.

In Fiji, articles focused on herbal and mind-body interventions (*Tukana may be saved*, The Fiji Times, 12 April, 2005). The major socio-cultural reason for CAM as alternative medicine was due to individuals losing faith in conventional treatment. Cases were highlighted where individuals found Fiji's conventional medicine to be ineffective and were turning to CAM, which they found to be more beneficial.

In New Zealand, the focus was on herbal remedies and energy therapies. There was a push to officially incorporate the use of CAM as part of New Zealand health care. The CAM systems discussed were Indian and Chinese healing systems (*Pinpointing better health care*, New Zealand Herald, 7 Aug, 2008) as well as Maori traditional systems of healing (*Waitangi tribunal recommendations*, 1 July, 2011). Arguments for increased recognition of Asian CAM were that the CAM practitioners and practices were being marginalized under current New Zealand health policies. Current issues concerning access to CAM pertained to the cost of CAM for patients, and the need for CAM to be subsidized by the government. Other issues were to do with the lack of recognition of traditional CAM medical systems as part of a more holistic medical practice and to make traditional CAM therapies more mainstream. Calls for increasing Maori CAM were grounded in the

health of the Maori population, which is currently regarded as being at a crisis point. In Fiji, there were no discussions on officially extending CAM's presence in healthcare.

### 5.2 Socio-economic determinants of CAM

In Fiji, the unavailability of conventional treatment resulted in a high use of alternative treatments. Individuals and communities were using herbal CAM as their only option due to lack of accessible medical facilities, equipment and personnel. Doctors cited the lack of cancer screening facilities in Fiji due to high cost as a significant problem (*Cancer claims up to 10 each year*, The Fiji Times, 16 June, 2008). Smaller island communities were reported to have been without a medical doctor or nurse for months and were using CAM to provide pain-relief and to treat minor ailments. The lack of conventional healthcare repeatedly affected the same outlying island communities. As an example, over 4,000 villagers on a small remote island were reported to be using only herbal remedies after they were left without conventional medical care in July 2008 (*Health centre closes door*, The Fiji Times, 25 July, 2008), and again a year and half later (*Villagers without doctor*, The Fiji Times, 13 Nov, 2009). There was no discussion of socio-economic determinants related to CAM use in New Zealand.

### 5.3 Legal and Political determinants of CAM use

In Fiji, a large proportion of the articles featured official medical, governmental and legal discourse on the inefficacy and dangers of CAM practices rather than conventional medical treatment. Doctors and the Health Ministry officials advised against Herbal CAM use. Such advice was issued when individuals died from ingesting herbal remedies (*Mystery deaths*, The Fiji Times, 25 July, 2006). There were no further news stories on criminal prosecutions against the CAM practitioners who had provided the herbal medicines.

Unlike Fiji, in New Zealand, the resultant death through indigenous CAM practices resulted in a charge of homicide against the practitioners (*Old*

*ways live on in dealing with 'curses'*, New Zealand Herald, 17 November, 2007). This death was the only one that was reported in the newspaper. The incident garnered national interest, with a movie documentary recently released about the incident (*Belief: The Possession of Janet Moses*, 2015).

Whereas in Fiji parents reported using CAM as alternative medicine for children's ailments out of necessity, in New Zealand a major concern was guardians' choice to use CAM as alternative medicine for chronically ill children under their guardianship. The media gave extensive coverage to the case of a New Zealand born mother living in Britain who fled with her 7-year-old son to prevent him undergoing potentially life-saving chemotherapy. Through a court injunction, the boy did undergo chemotherapy and recovered from his brain tumour, while the mother's concerns were portrayed in the media as illogical (*Mum on run fears 'frying' son's brain*, New Zealand Herald, 9 December, 2012).

#### 5.4 Caution against specific herbal CAM products

In Fiji, cautionary advice was also given against new herbal products on the market. In one news story, the Director for Health was quoted as saying that "some traditional medicines had healing powers", however, she advised caution when using newer herbal products on the market, such as Goji juice, which was popular in Fiji (*Take care with herbs: Ministry*, The Fiji Times, 24 June, 2006). Doctors also warned against herbal and spiritual CAM usage specifically for mental illness (*Treat mental illness seriously, says Kuruleca*, The Fiji Times, 7 May, 2007) and cervical and breast cancer treatment, the leading cancer types in Fiji (*Cancer linked to fear*, The Fiji Times, 30 September, 2009). Doctors reported that use of herbal remedies and spiritual healing practices were ineffective and detrimental to patients' mental health and their chances of surviving cancer due to the prolonged lack of adequate conventional medical intervention.

#### 5.5 Regulation of CAM as medical practice

In both countries herbal CAM products, particularly

those that were to be ingested, were highlighted as in need of more stringent legislation. In New Zealand, the emphasis was on the need for full disclosure of ingredients and scientific proof for any claims made regarding CAM therapeutic abilities.

In New Zealand, there was a push to officially incorporate CAM into national healthcare. The CAM systems discussed were Indian and Chinese healing systems (*Pinpointing better health care*, New Zealand Herald, 7 Aug, 2008) as well as indigenous Maori traditional systems of healing (*Waitangi tribunal recommendations*, New Zealand Herald, 1 July, 2011). Arguments for increased recognition of Asian CAM were that the CAM practitioners and practices were being marginalized under current New Zealand health policies. Current issues concerning access to CAM pertained to the cost of CAM for patients, and the need for CAM to be subsidized by the government. Other concerns were the lack of recognition of traditional CAM medical systems as part of a more holistic medical practice. Calls for increasing and mainstreaming Maori CAM were grounded in the health of the indigenous Maori population, which is currently regarded as being at a crisis point (McGavock, 2011).

In Fiji, the emphasis was on who could legally sell CAM herbal products. The legal aspects of being a CAM practitioner, and the definition of CAM were addressed, bringing to the fore the debate on who can provide therapeutic remedies with governmental efforts to control the sale and use of CAM products and services (*Ministry tough on herbal dealers*, The Fiji Times, 22 May, 2010). Articles focused on the ramifications of not complying with the Ministry's directive. Individuals who were claiming to be CAM practitioners, but who did not have licenses to operate were being arrested (*Herbalist in custody*, The Fiji Times, 7 May, 2009), their therapeutic equipment and products seized, and if they were from overseas, they were extradited (*Visa violators to go home*, The Fiji Times, 15 June, 2010; *Police probe theft*, The Fiji Times, 18 February, 2010).



In both New Zealand and Fiji indigenous CAM therapies were exempt from such legislation. Fiji went further to legally safeguard the indigenous intellectual property rights of its people with indigenous ownership and their rights to profit from the sale of the herbal plants and products being passed into law (*Bill to target resource owners*, The Fiji Times, 24 June, 2005).

In New Zealand, significant steps have been taken to regulate CAM practices and to improve the safety of patients through increased knowledge on the correct use of CAM. This is evidenced by the publicized workshops on Maori traditional healing systems (*Centre revives art of traditional healing*, New Zealand Herald, 2 June, 2009) seminars on acupuncture (*Forum brings experts*, New Zealand Herald, 1 January, 2011) and CAM conferences (*Conference set to blend science with tradition*, New Zealand Herald, 20 April, 2009). Moreover, the government has approved the teaching of CAM at the tertiary level (*Course a boost for natural medicine*, 13 July, 2009, *A career in acupuncture*, New Zealand Herald, 29 September, 2010). Similarly, in Fiji, to improve safety of CAM patients, there is a national project to codify the country's oral herbal knowledge (*Book of healing*, The Fiji Times, 27 February, 2009).

## 6. Discussion

An analysis of the thematic depiction of CAM within national newspapers has a two-fold advantage: it provides insight into healthcare provisions within a country, and it provides insight into the current place of CAM within the healthcare scheme of a society. More specifically, such a study provides an insight into issues society feels are of importance for discussion in the public sphere related to CAM behavior in the developing and developed worlds.

Based on the study's findings, CAM appears to be understood, practiced, and promoted via cultural channels in New Zealand and Fiji, due to the higher cultural and psychological accessibility of CAM compared to conventional medicine (Barrett, Marchand, Scheder, Applebaum, Plane et al., 2004).

Decisions about what types of healthcare to seek are influenced by culture (Institute of Medicine, 2005), which is often intricately tied to disparity and poverty issues (Tripp-Reimer, Choi, Kelley & Enslein, 2001).

### 6.1 CAM behaviors in the developed world

The findings correlate with a growing body of literature that emphasizes the inter-relationship between attitudes towards CAM and CAM-related societal behaviours in New Zealand. Research demonstrates the lay population's increasing choice in both the self-administration of CAM (Chrystal, Allan, Forgeson & Isaacs, 2003; Evans, Duncan, McHugh, Shaw, & Wilson, 2008; McGavock, 2011; Milne, Waldie & Poulton, 2000), and the use of CAM in families (Karuna, 2012; Wilson, Dowson & Mangin, 2007). Research has also probed CAM attitudes and behaviours in the realm of the caregivers. In addition to the increased options in CAM therapies available within New Zealand (Quinn, 2006), there is evidence that medical practitioners are becoming more receptive of CAM (Harding & Foureur, 2009; Lo, 2012; Poynton, Dowell, Dew & Egan, 2006). Attention has also been given to understanding the ethics of CAM practitioners (Leach, 2013; Patel & Standen, 2014; Rose, 2011). Intersecting with public and caregivers' attitudes and behaviours towards CAM is the national legislations and policies governing the availability of CAM therapies (Baer, 2009; Ghosh, Skinner & Ferguson, 2006).

### 6.2 CAM behaviors in the developing world

In Fiji, news coverage of CAM serves as an indicator of public health issues within developing countries. The CAM-related issues are multi-faceted and multi-sectorial, involving both national and regional co-operation. The news coverage raises questions on both access to healthcare and the quality of access to healthcare and acknowledges the importance of integrating CAM as part of the country's healthcare. According to WHO (2008), 70-80% of Fiji's population has access to conventional healthcare and only 40% have access to quality conventional healthcare. The most recent review of Fiji's health system (WHO,

2011) cites some of the major reasons for the disparity in healthcare access. These issues are applicable to other developing countries:

*Management of health monetary resources:* Decades of political instability, which continually impact health policy decision-making, adherence to allocation of health related projects, monitoring and reform. Lower national revenue places constraints on health-related fiscal management. Low national health budget: Fiji has one of the lowest national budgetary allocations for public healthcare amongst the Pacific island countries. The most recent review of Fiji's healthcare system finds that Fiji spends between 2.9% and 3.5% of GDP (WHO, 2011: 6-7). This allocation to healthcare has remained static since the 1970s. Lack of multi-sectorial and cross-sectorial communication and investment: Lack of consolidation of resources across ministerial sectors, NGOs and government and private sectors.

*Uneven distribution of health services:* Increase in the incidence of new diseases, increase in NCDs, natural disaster related diseases across wide spread populations: lack of manpower and funding impacts timely and accurate interventions and also impacts the ability of the health service to adapt to the changing needs of the people. Decreasing workforce due to migration and poor retention packages. Poor infrastructure, which is not maintained or upgraded. In rural and poor urban areas, the absence of basic infrastructure pose challenges to sanitation and increases the incidence of diseases such as typhoid and cholera. Lack of appropriate technology due to one or more of the following: the lack of expertise, cost of initial purchase, inability to finance ongoing maintenance.

*Geographic and income related disparities:* Concentration of healthcare in urban areas and the inequality in funding and support in the rural areas: lack of deployment of resources in rural areas. Increasing privatization of healthcare and increasing poverty: Private healthcare has increased in Fiji, which is funded privately or through health

insurance (WHO, 2011: 7), however, there is an increasing disparity between those who can and can't afford it. At the same time, there is an increasing rate of poverty, which increases the demand for free public healthcare. However, the public health service cannot adequately cope with the demand.

The above listed factors contributing to poor management of health monetary resources, uneven distribution of health services and geographic and income related disparities pose significant challenges in Fiji's ability to meet SDG goals. In such a climate, the role of CAM as a primary provision of healthcare is crucial (WHO, 2011: 56).

## 7. Recommendations

There is recognition of the extensive use of CAM in Fiji and the need to both codify and transmit this knowledge within Fiji. Reasons for this include the limited access to conventional treatment, the need to conserve medicinal plant resources, the need to improve knowledge on the correct method of preparation and use of herbal CAM to minimize side effects and death through CAM practices. However, the majority of research on Fiji's CAM is on indigenous herbal CAM. There is only one in-depth study of Indian herbal CAM (Singh, 1986). Research on indigenous Fijian CAM has documented the medicinal plants (Cambie & Ash, 1994), the use of these plants (Strathy, 2000), clinical trials on the efficacy of Fiji's medicinal plants (Cragg & Newman, 2005) and the intergenerational knowledge transmission of indigenous herbal CAM practices (Henrich & Broesch, 2011; Kline, Boyd & Henrich, 2013). The official and extensive codification of herbal CAM practices in Fiji acknowledges the place of herbal treatment in the Fijian medical ethos.

- Increase the role of CAM in Fiji's healthcare through the establishment of national policies, budgetary allocation
- Engagement with traditional healers within the country

To combat false knowledge:

- Increase education in safe CAM practices

for primary healthcare through workshops for the general public and in school curriculum

- Incorporate CAM education for the medical professionals
- Increase evidence based research into the efficacy of CAM and codification of CAM practices

Some of these recommendations are currently underway, such as the engagement with traditional healers, and workshops (Strathy, 2000). While codification of indigenous CAM has begun (Cambie & Ash, 1994; Strathy, 2000), codification of Indian CAM practices is an area for development. However, as with other schemes in Fiji, these need to be nationally supported long-term through stewardship and engagement with community stakeholders (village leaders and village committees).

## 8. Conclusion

Media coverage can form a major influence on societal perspectives towards CAM use, attitudes towards CAM efficacy, the place of CAM practices in relation to conventional medical practices. Long-term impact of CAM perspectives influences healthcare policies, laws, investments: the incorporation of CAM (and certain types of CAM over others) as complementary medicine, the national laws governing CAM practice, the prescribing of CAM as remedy, the advertising of CAM, the allocation of funding for (certain types of) CAM-related research. Our findings can be presented in light of global issues in the developing and developed worlds. Future studies can provide a comparative analysis of CAM within media frames compared to societal perspectives in the developing and developed worlds.

While this study provides an analysis of thematic trends in the presentation of CAM related news within developed and developing worlds, the research does not measure the actual use of CAM within such countries. Moreover, countries are presented as homogenized entities, with equal access to conventional and complementary healthcare

treatments. The study also does not take into account the individual attitudes towards CAM types and practices within a country. In this study, each newspaper is portrayed as depicting the trend throughout that country. A future study could address these limitations by looking more closely at a cross-section of newspapers within a country and their presentation of CAM related issues.

## References:

- Baer, H. A. (2009). *Complementary medicine in Australia and New Zealand: Its popularisation, legitimisation and dilemmas*. Verdant House.
- Barrett, B., Marchand, L., Scheder, J., Appelbaum, D., Plane, M. B., Blustein, J., Maberry, R., & Capperino, C. (2004). What complementary and alternative medicine practitioners say about health and health care. *The Annals of Family Medicine*, 2(3), 253-259.
- Bonevski, B., Wilson, A., & Henry, D. A. (2008). An analysis of news media coverage of complementary and alternative medicine. *PLoS One*, 3(6), e2406.
- Bubela, T., Boon, H., & Caulfield, T. (2008). Herbal remedy clinical trials in the media: a comparison with the coverage of conventional pharmaceuticals. *BMC medicine*, 6(1), 35.
- Cambie, R. C., Ash, J. (1994). *Fijian medicinal plants*. CSIRO Publishing: East Melbourne, Victoria, Australia.
- Chen K. (2001). *Fiji national workshop on traditional medicine: Mission report 25-31 March 2001*. Manila: WHO Regional Office for the Western Pacific.
- Chrystal, K., Allan, S., Forgeson, G., & Isaacs, R. (2003). The use of complementary/alternative medicine by cancer patients in a New Zealand regional cancer treatment centre. *Age*, 30, 31-50.
- Clarke J, Romagnoli A., Sargent C., & van Amerom, G. (2010). The portrayal of complementary and alternative medicine in mass print magazines since 1980. *The Journal of Alternative and Complementary Medicine*, 16(1): 125-30.
- Cottingham, P., Adams, J., Vempati, R., Dunn, J., & Sibbritt, D. (2015). The characteristics, experiences and perceptions of naturopathic and herbal medicine practitioners: results from a national



- survey in New Zealand. *BMC Complementary and Alternative Medicine*, 15(1), 114.
- Cragg, G. M., & Newman, D. J. (2005). Plants as a source of anti-cancer agents. *Journal of Ethnopharmacology*, 100(1), 72-79.
- Egede, L. E. (2006). Race, ethnicity, culture, and disparities in health care. *Journal of General Internal Medicine*, 21(6): 667-669.
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51-58.
- Evans, A., Duncan, B., McHugh, P., Shaw, J., & Wilson, C. (2008). Inpatients' use, understanding, and attitudes towards traditional, complementary and alternative therapies at a provincial New Zealand hospital. *New Zealand Medical Journal*, 121(1278), 6-10.
- Ghosh, D., Skinner, M., & Ferguson, L. R. (2006). The role of the Therapeutic Goods Administration and the Medicine and Medical Devices Safety Authority in evaluating complementary and alternative medicines in Australia and New Zealand. *Toxicology*, 221(1), 88-94.
- Gitlin, T. (1980). *The whole world is watching: Mass media in the making & unmaking of the new left*. University of California Press.
- Gopalkrishnan, N. (2015). The economics of integrative medicine: An emerging paradigm in healthcare. *The Journal of Pacific Studies*, 35(1): 101-116.
- Harding, D., & Foureur, M. (2009). New Zealand and Canadian Midwives' Use of Complementary and Alternative Medicine (CAM). *New Zealand College of Midwives Journal*, 40(1): 7-12.
- Henrich, J., & Broesch, J. (2011). On the nature of cultural transmission networks: evidence from Fijian villages for adaptive learning biases. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 366(1567), 1139-1148.
- Institute of Medicine (US) Committee on the Use of Complementary and Alternative Medicine by the American Public. (2005). *Complementary and Alternative Medicine in the United States*. Washington (DC): National Academies Press.
- Institute of Medicine. (2005). *Complementary and Alternative Medicine in the United States*. Washington (DC): National Academies Press.
- Karuna, F. (2012). Osteopathy use in Families of the Auckland Playcentre Association of New Zealand: Prevalence and associated factors (Masters dissertation, Unitec Institute of Technology).
- Kline, M. A., Boyd, R., & Henrich, J. (2013). Teaching and the life history of cultural transmission in Fijian villages. *Human Nature*, 24(4), 351-374.
- Leach, M. J. (2013). Profile of the complementary and alternative medicine workforce across Australia, New Zealand, Canada, United States and United Kingdom. *Complementary Therapies in Medicine*, 21(4), 364-378.
- Lo, S. L. H. (2012). Perceptions and attitudes of New Zealand Plunket nurses toward the use of complementary and alternative medicine in children (Doctoral dissertation, Unitec Institute of Technology).
- McGavock, Z. C. (2011). A life transformed: The lived experiences of Māori with chronic pain: a thesis presented in partial fulfilment of the requirements for the degree of Masters of Science in Health Psychology at Massey University, Wellington, New Zealand (Doctoral dissertation).
- Milne BJ, Waldie KE, Poulton R. (2000). Users of unconventional practitioners: a profile of 26 year old New Zealanders. *New Zealand Medical Journal*, 113: 396-9.
- Patel, A., & Standen, C. (2014). An Auckland-based student acupuncture clinic patient profile and utilisation study. *The New Zealand Medical Journal*, 127(1398), 134.
- Poynton, L., Dowell, A., Dew, K., & Egan, T. (2006). General practitioners' attitudes toward (and use of) complementary and alternative medicine: a New Zealand nationwide survey. *The New Zealand Medical Journal*, 119(1247).
- Quinn, F. (2006). CAM in New Zealand. *Focus on Alternative and Complementary Therapies*, 11(3), 181-182.
- Rose, L. (2011). A preliminary investigation into the attitudes and practices of New Zealand osteopaths in relation to the health care system: does the future hold a greater degree of integration into the biomedical system? (Doctoral dissertation, UNITEC

- Institute of Technology).
- Seale, C. (2003). Health and media: An overview. *Sociology of Health & Illness*, 25(6), 513-531.
- Singh, Y. N. (1986). Traditional medicine in Fiji: some herbal folk cures used by Fiji Indians. *Journal of Ethnopharmacology*, 15(1), 57-88.
- Strathy, K. (2000). Wainimate: Valuing women's traditional medicine knowledge in Fiji. *WE International*, 48-49, 30-2.
- Tripp-Reimer, T., Choi, E., Kelley, L. S. & Enslein J. C. (2001). Cultural barriers to care: Inverting the problem. *Diabetes Spectrum*, 14(1), 13-22
- UN Chronicle. (2014). Beyond 2015. L1(4).
- Weeks, L. C., & Strudsholm, T. (2008). A scoping review of research on complementary and alternative medicine (CAM) and the mass media: looking back, moving forward. *BMC Complementary and Alternative Medicine*, 8(1), 43.
- Weeks, L., Verhoef, M., & Scott, C. (2007). Presenting the alternative: cancer and complementary and alternative medicine in the Canadian print media. *Supportive Care in Cancer*, 15(8), 931-938.
- Wilson, K., Dowson, C., & Mangin, D. (2007). Prevalence of complementary and alternative medicine use in Christchurch, New Zealand: Children attending general practice versus paediatric outpatients. *New Zealand Medical Journal*, 12011251.
- World Health Organization. (2008). Primary health care: Fiji's broken dream. *Bulletin of the World Health Organization*, 86(3) 161-240.
- World Health Organization. (2013). *WHO Traditional Medicine Strategy 2014-2023*. Geneva: World Health Organization.
- World Health Organization. (2011). *The Fiji Islands Health System Review*. Geneva: World Health Organization.